USER MANUAL

MOBIUS

strymon®

Front Panel Controls

VALUE: Provides fine adjustment of LFO speed when speed is displayed. Scrolls through presets when bank or name is displayed. **Push** to access the parameter menu for the current mod machine. **Hold** to access the global menu.

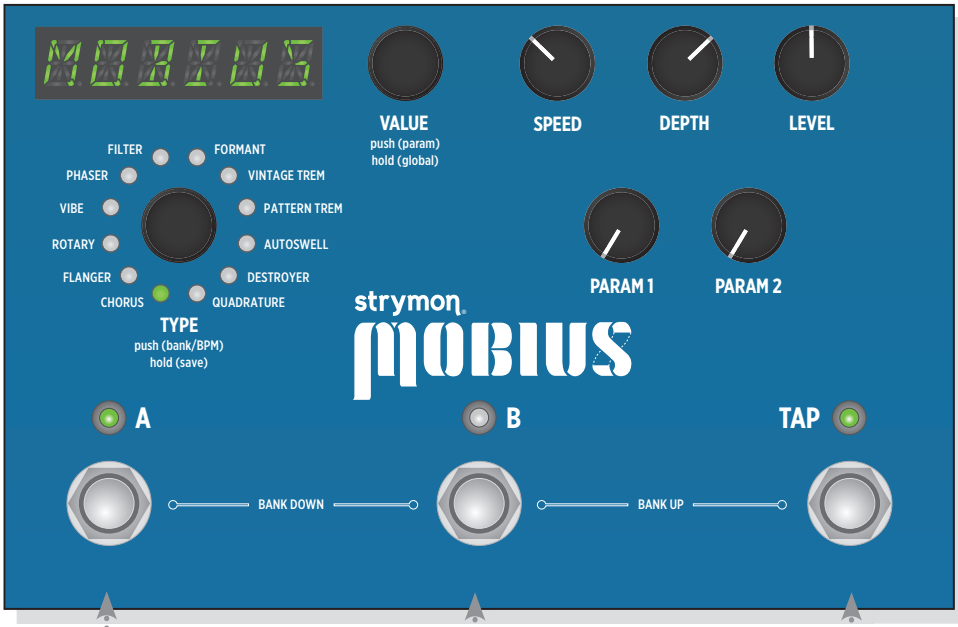
SPEED: Provides coarse adjustment of LFO speed.

DEPTH: Sets the modulation depth for the current mod machine.

LEVEL: Adjusts the output level from -3dB to +3dB. **Set to 12 o'clock for unity gain.**

TYPE: Selects the currently active **mod machine. Push** to toggle the display between showing BPM and the current bank. **Hold** to save the current preset.

TIP: If the parameter or global menu is currently displayed, push to **exit** and show bank or BPM.



PARAM 1: Assignable to the parameters in the current mod machine. To assign the PARAM 1 knob, navigate to the desired parameter, press and hold the value encoder and turn the PARAM 1 knob.

A & B LEDS: Green if **active**. Amber if the preset has been **edited**. Off if **bypassed**.
TAP LED: Pulses to indicate the current LFO rate. Flashes amber to indicate that a tap division is active.

TIP: To find the knob positions of a saved preset, turn each knob until the LED returns to green after glowing amber.

FOOTSWITCH A: Press to engage or bypass preset A of the current bank.

FOOTSWITCH B: Press to engage or bypass preset B of the current bank.

TAP: Tap to set the LFO speed. Press once to sync LFO for Phaser, Filter, Formant, Pattern Trem and Quadrature. Assignable to tap or speed select for Rotary.

PARAM 2: Assignable to the parameters in the current mod machine. To assign the PARAM 2 knob, navigate to the desired parameter, press and hold the value encoder and turn the PARAM 2 knob.

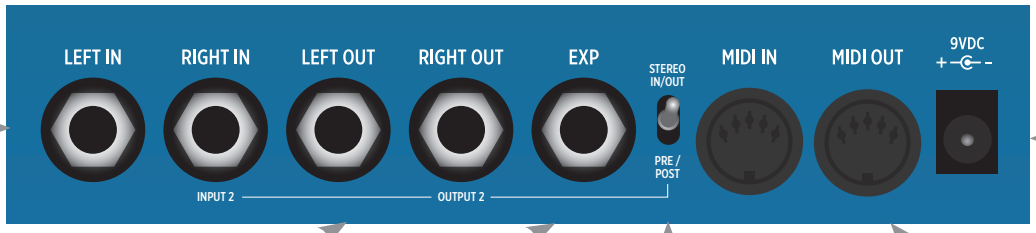
BANK SELECT: Press A & B to select a lower bank. Press B & TAP to select a higher bank. While the selected bank is pending it is displayed as "B.A.N.K.xx". Where xx is the bank number. After the desired bank is selected, press A or B to activate a preset from that bank.

MOD MACHINES:

CHORUS: Full featured Chorus with five distinct modes—dBucket, Multi, Vibrato, Detune and Digital.
FLANGER: Deep and rich Flanger with a wide palette of sonic possibilities. 6 unique flanger algorithms.
ROTARY: Accurate implementation of a rotary speaker cabinet commonly used with tonewheel organs and guitars.
VIBE: Recreation of the late '60s "vibe" circuit which was one of the first modulation effects of it's time.
PHASER: Highly flexible phaser with 2, 4, 6, 8, 12, 16 stage, and barber pole modes. Feedback control and selectable LFO waveforms.
FILTER: LFO synced filter with three filter types, eight LFO waveshapes and variable resonance.
FORMANT: Filter type that emulates the human vocal tract and also features selectable LFO waveforms.
VINTAGE TREM: Three distinctively different classic tremolo sounds from the '60s.
PATTERN TREM: Pattern synced tremolo with user definable patterns and selectable LFO waveforms.
AUTOSWELL: Auto volume swell triggered by input signal. Rise time and envelope shape are variable. Speed/Depth knobs add chorus.
DESTROYER: Mangles your audio with bit & sample rate reduction, filters, and vinyl noise. Vinyl warping controlled by Speed/Depth knobs.
QUADRATURE: Advanced frequency shifter, AM ring modulator, and FM modulator all with selectable LFO waveforms.

REAR PANEL:

INPUTS: High impedance inputs. Use **LEFT** input for mono. RIGHT IN is used as input 2 if using a pre/post configuration.



POWER: NEVER plug into voltage higher than 9VDC. Requires at least 300mA of available current.

OUTPUTS: Use **LEFT** output for mono. RIGHT OUT is used as output 2 if using a pre/post configuration.

EXP: Connect an expression pedal or switch for external tap tempo.

SIGNAL ROUTING SWITCH: Choose between standard stereo in/out operation or pre/post mode. Turn to Page 22 for more details.

MIDI: Full featured MIDI input and output supporting MIDI CCs, Program changes, etc. Consult Page 23 for full MIDI spec.

MOD MACHINE PARAMETERS:

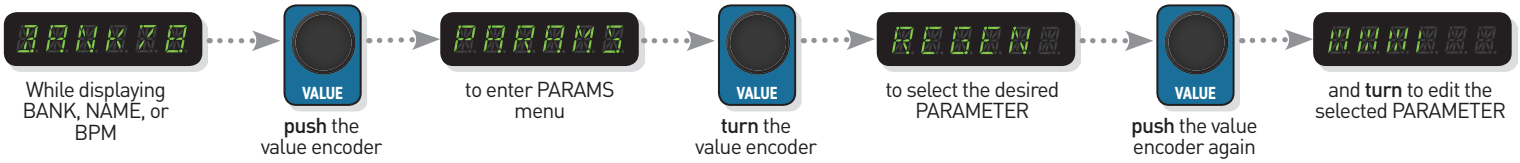
Each Mod Machine has numerous parameters in the parameter menu to tweak and customize your sound. Please consult the Pages 8-19 for a full explanation of all deep edit parameters.

COMMON PARAMETERS **-** These are available on Mod machines and saved per preset

TAPDIV (TAP DIVISIONS): When tapping tempo, BPM can be set for Whole, Half, Quarter, Dotted Eight, Eighth, Triplets, or Sixteenth notes
PR/PST (PRE/POST): If using a pre/post setup, this selects whether the effect in the preset is pre or post.
NAME: Allows editing the 16 character name of the current preset. Use the VALUE encoder to change the selected character. Use the TYPE encoder to select a character. Exit by pressing the VALUE encoder, then press and hold the TYPE encoder to **save** the name permanently. **Note:** For the preset name to be displayed the NAMES global must be set to ON or SCROLL.
EP (EXPRESSION PEDAL ON/OFF): Configure the Expression pedal input to be ON or OFF.
EP SET (EXPRESSION PEDAL SET UP): Set up which knobs are controlled by the expression pedal. Turn the knobs while HEEL is displayed to select the minimum setting for each knob to be controlled. Turn the knobs while TOE is displayed to select the maximum setting for each knob to be controlled.

UNIQUE PARAMETERS **-** All Mod machines feature unique parameters. For a full listing of each parameter available on every Mod machine type please consult the **User Manual.**

EDITING PARAMETERS:



IMPORTANT GLOBAL SETTINGS:

To access the global menu **push and hold** the **value** encoder. Turn the encoder to select the global to edit. Push the value encoder again to edit the selected global. Hold again to exit the global menu.

BPM/HZ: Sets display to show tempo in BPM or Hz.
BYPASS: Select **TRUEBYP** to bypass with true bypass relays. Select **BUFBYP** to bypass with a high quality analog buffer.
GLOBAL TAP: Allows the last tapped tempo to affect all presets regardless of the tempo saved in the preset.
NAMES (PRESET NAMES): Set to OFF to only display bank number, set to ON to show the first six characters of the preset name, set to SCROLL to scroll the preset name across the display when it is first selected.
EXP MD (EXP MODE): Configures the EXP input to use an **expression pedal** or an **external tap footswitch**.

The full list of global settings are detailed on Pages 20-21.

In Depth: PARAM 1 & 2 controls

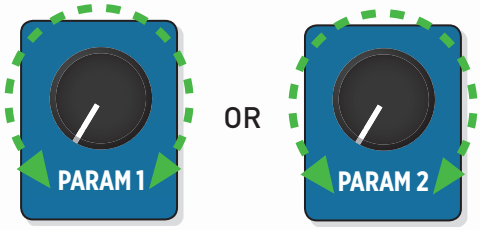
The **PARAM 1 & PARAM 2** knobs allow you to continuously control any desired parameter of the currently active mod machine. This can be very convenient in allowing continuous control over the various mod machines. For example, REGEN in a flanger can be assigned to one of the parameter knobs to allow for continuous control over the flanger feedback.

ASSIGNING A PARAMETER

STEP 1: Navigate to the desired parameter to be assigned.

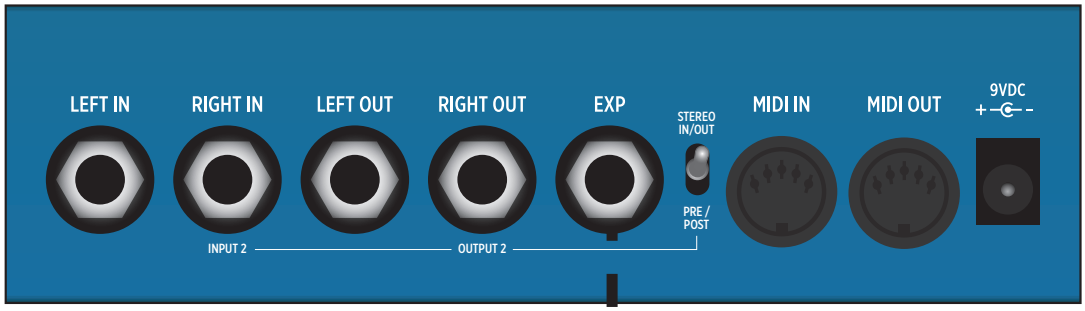
STEP 2: Press and hold the value encoder.

STEP 3: While holding the value encoder. Turn either the PARAM 1 or PARAM 2 knob to assign a parameter.



STEP 4: Turn the newly assigned PARAM knob to adjust your mod machine parameter.

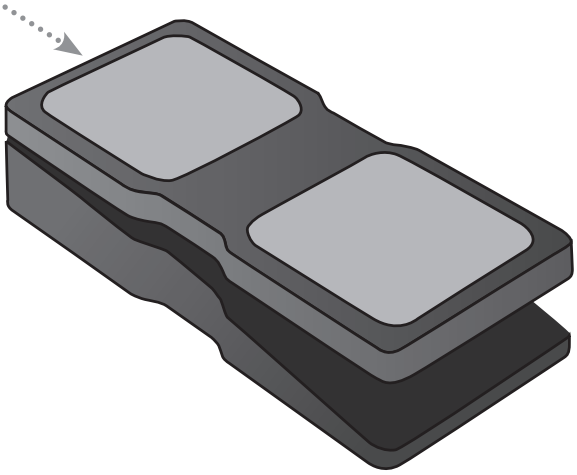
EXP Connections



Connect an external TAP switch to tap tempo remotely. Use a standard TRS cable to connect the external switch. Set the **EXP MD** global setting to **TAP** to use external tap.

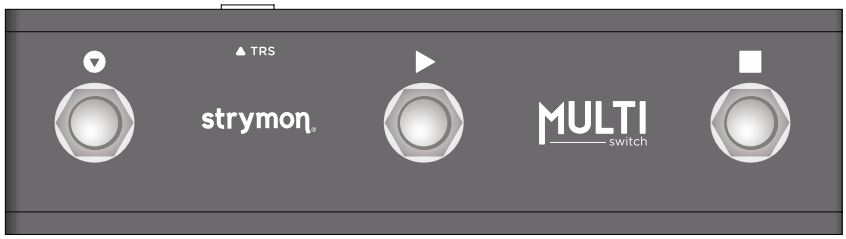
OR

Connect a standard TRS **expression pedal** for continuous control over any knob. To select the knob(s) controlled by the expression pedal, use the EP SET parameter in each preset. All knobs can be controlled simultaneously. See **Common Parameters** for set up instructions.



Connect a **Strymon MultiSwitch** for external tap, bank, or preset selection. Set the EXP MD global setting to either TAP, BANK, or PRESET.

Please refer to the MultiSwitch user manual for detailed setup information: strymon.net/support/multiswitch



Banks and Presets

Mobius has **100** banks with **A** & **B** presets in each bank. Banks are numbered 0 to 99 on the display. The presets in banks 0-49 are duplicated in banks 50-99 at the factory.

Saving Presets

Save a preset to the current location:

hold the TYPE encoder

push the TYPE encoder to **save** your settings

Save a preset to a new location:

hold the TYPE encoder

turn the VALUE encoder

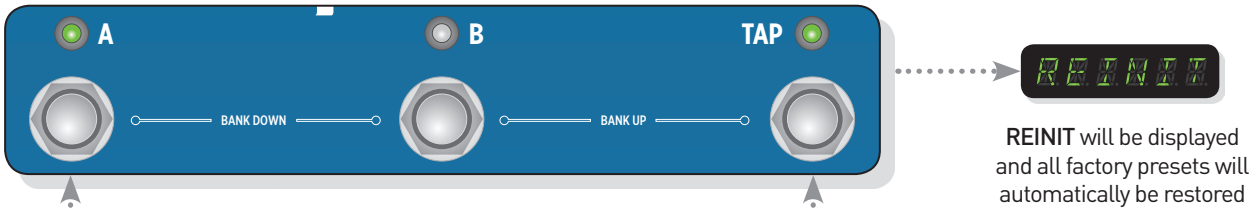
to select the bank to save to

push the TYPE encoder *or* the A or B footswitch to **save** your settings

To cancel an in-progress save press the TAP footswitch.

Restoring Factory Presets

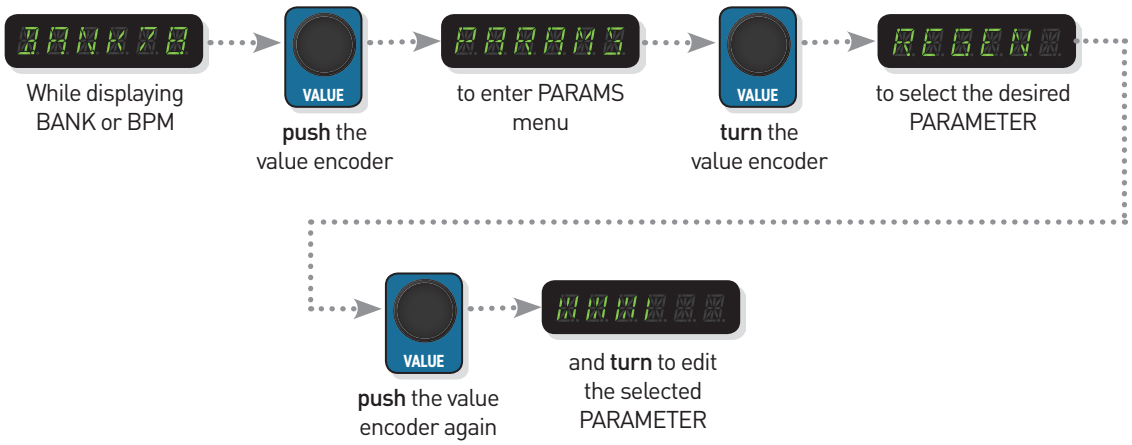
CAUTION: This procedure will erase any custom presets saved in the Mobius and restore them to factory



REINIT will be displayed and all factory presets will automatically be restored

POWER UP while holding **A** & **TAP.** Keep holding for 5 seconds after Mobius has powered up.

Editing Parameters



Mod Machines: Common Parameters

All Mod Machines share a set of parameters. These parameters are saved with each preset and include:

Tap Division: Selects the subdivision to use for LFO speed when tapping in a tempo. Tap division options include:

Whole, Half, Quarter(default), Dotted Eight, Eighth, Triplets, Sixteenth notes

note: If TAPDIV is set to anything other than Quarter notes, the TAP LED will pulse in amber

Pre / Post: Allows configuration per preset of the pre/post configuration available via the rear panel toggle switch. When Mobius is used in pre/post configuration, set to "PRE" to place the modulation effect in front of your amp and set to "POST" to place the modulation effect in your amp's effect loop.

Name: Allows editing the 16 character name of the current patch. Use the VALUE encoder to change the selected character. Use the TYPE encoder to select a character. Exit by pressing the VALUE encoder, then press and hold the TYPE encoder to **SAVE** the name permanently.

note: For the preset name to be displayed the NAMES global must be set to ON or SCROLL.

Expression Pedal ON/OFF: Enables or disables the expression pedal input for each patch.

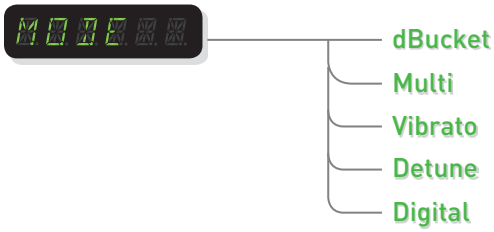
Expression Pedal Set: Enters the expression pedal setup for each patch. All knobs can be configured to be used with the expression pedal. To set up which knobs are controlled by the expression pedal, push the Value encoder when it displays "EP SET" and it will then display "HEEL". Turn the knob(s) to the position desired at heel down on the expression pedal. Then, turn the Value encoder right to display"TOE" and set the knobs to their desired values at the toe down position on the expression pedal. An expression pedal can control all of the knobs simultaneously.

Mod Machines: Chorus

A full featured Chorus with 5 distinct modes. dBucket, Multi and Vibrato all utilize our dBucket variable clock technology for classic analog bucket brigade style chorusing. dBucket utilizes a single LFO while Multi utilizes multiple LFOs simultaneously for a distinctly rich sounding chorus. Vibrato is a pitch modulation effect reminiscent of bucket brigade style pitch modulation effects. The Detune and Digital modes are clean digital chorus effects reminiscent of the rack effects of the '80s. Detune applys a "thickening" effect to your signal while Digital is a crystal clear chorusing algorithm.

PARAMETERS:

Mode: Selects the current Chorus algorithm. Each algorithm is completely unique in its sonic character.



Mix: Sets the Mix of the wet Chorus signal relative to the uneffected dry signal. A 50/50 mix is usually the most typical setting.

Tone: Allows adjustment of the brightness of the effected signal.

TIPS & TRICKS:

dBCKET mode covers the sounds of the classic analog choruses from the 1970's. Turn the DEPTH Knob to 12:00 and the MIX parameter at around 80% for the coveted large-box chorus sound. Turn the MIX back to half-way to experience the sound of the first compact chorus pedal.

MULTI mode's three dBucket modulated-delay- lines allow for super-lush modulation at high mix and depth levels without excessive 'warble'. If you have a stereo rig, you owe it to yourself to check this out. Try preset 00A for starters.

VIBRTO mode uses our dBucket and variable-clock technology to capture the warmth of old-school stomp circuits. Set the MIX param to maximum for pure vibrato. Reduce the MIX to add some dry signal to give a vibrato-influenced chorus.

DETUNE mode mixes a pitch-detuned signal with the dry input to create a chorus that doesn't use an LFO. The SPEED knob controls the pitch shift from -25 cents to +25 cents, while the DEPTH knob adds a widening or doubling effect as it is turned up for a distinctive '80s feel. Set MIX to 50% for the fullest effect.

DIGITL mode uses a classic modulated digital delay line to produce clean, pristine, unadulterated chorus tones. Set MIX to 50% for traditional digital chorus sounds.

Mod Machines: Flanger

A deep and rich Flanger with a wide pallete of sonic possibilities. Six separate modes cover a variety of flanger sounds. Each separate algorithm uses dBucket technology at its heart for authentic recreations of classic bucket brigade flangers.

PARAMETERS:

Mode: Sets the currently active Flanger algorithm.

- **Silver** - a re-creation of the classic "silver box" flanger
- **Grey** - the classic "grey box" flanger featuring its unusual LFO waveshape
- **Black +** - one of the most sought after flange sounds in history, with positive regeneration
- **Black -** - the black box flanger with negative regeneration
- **Zero +** - a through zero flanger with positive regeneration
- **Zero -** - a through zero flanger with negative regeneration

Regen: Adjusts the amount of feedback in the flanger's delay line. Adjust high for more extreme flanging sounds.

Manual: Controls the delay time of the flanger. Higher settings produce higher frequency flanging effects and vice versa.

TIPS & TRICKS:

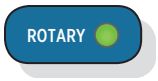
SILVER mode creates textured, airy flanging. Turn up the Depth and Regen params to add color to stacatto rhythm parts, or turn back for a mellower chorus-like effect.

GREY mode's logarithmic LFO creates a dramatic sweep that lingers at the higher registers when the DEPTH knob is high and the speed is slow. Increase the REGEN parameter to intensify the effect.

BLACK mode's super-wide sweep creates a signature 'swoop' at high depth settings. At fast speeds, this mode will get crazy.

In the **ZERO modes** with the MANUAL parameter at minimum, the 'top' of the sweep just passes through zero. Increasing the MANUAL parameter moves the sweep even further past zero. Increase the DEPTH to add lower frequency flanging at the 'bottom' of the sweep.

Mod Machines: Rotary



A realistic recreation of a rotary speaker cabinet commonly used with tonewheel organs and guitars. Just like an actual rotating speaker cabinet, the speed of rotation can be varied between slow and fast speeds.

PARAMETERS:

Horn Level: Controls the output of the high frequency rotating horn driver.

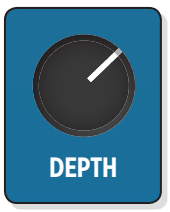
Preamp Drive: Controls the drive of the rotary cabinet's tube preamp and phase inverter stages. Turn up for a more overdriven cab sound.

Slow Rotor speed: Controls the speed of the rotors in SLOW speed.

Acceleration: Controls how quickly the rotors transition from Fast to Slow and from Slow to Fast speed. The rotors will accelerate independently.

TAP Switch: Determines whether to use the TAP footswitch as a tap tempo or a slow/fast speed toggle.

Mic Distance: Varies the distance of the two stereo microphones from the rotating horn driver. The **DEPTH** knob takes this function on the Rotary machine.



TIPS & TRICKS: In the ROTARY machine, the SPEED knob controls the fast rotor speed. Set the DEPTH control high for close-miking and maximum intensity, and dial it back for a more mellow effect.

Mod Machines: Vibe

A recreation of the late '60s "vibe" circuit which was one of the first modulation effects of its time. A staple in classic rock lead guitar of the era and originally intended to be a recreation of a rotary speaker sound, the vibe has its own unique niche in the world of modulation.

PARAMETERS:

Waveshape: Varies the shape of the LFO by warping its waveform and duty cycle.

Low End Contour: Allows for shaping the low-end from full low-end to progressive high-passing.

Headroom: Adjusts the amount of distortion within the vibe circuitry. Set to maximum for the cleanest vibe tones, and dial back to add the feel and grit of dirtier vibe tones.

Mode: Toggles the vibe mode between vibe (vibrato) and chorus.

TIPS & TRICKS:

The DEPTH knob changes the character of the VIBE from a smooth pulsing to a warbled undulation, most noticeable at slower speeds. For maximum throb, set the LO END param to the '+' side.

The quintessential VIBE sound occurs in the VIBE machine's CHORUS mode. This mode combines the input signal with the wet effect signal, producing the psychedelic phasey sound. The vintage vibe effects had a switch that removed the unaffected dry signal from the output, which results in a unique 'phase-shift vibrato'. Select the VIBRTO mode for this vibrato effect. Try setting the WAVSHP param to maximum to get some vintage-amp-inspired vibrato mojo.

Mod Machines: Phaser

PHASER

From the thick and chewy 2, 4 and 6 stage modes, to the rich and swirly 8, 12 and 16 stage modes, the PHASER machine offers a full palette of traditional and innovative phaser sounds. For added fun, a unique BARBER mode is added, derived from the frequency shifters developed in the 1970's.

PARAMETERS:

Mode: Selects the current phaser algorithm.

- 2 Stage
- 4 Stage
- 6 Stage
- 8 Stage
- 12 Stage
- 16 Stage
- Barber Pole

TIPS & TRICKS: For classic orange phaser sounds, set MODE to '4 STG', Depth knob to about 2 o'clock, and the REGEN param at half or a bit less to taste. Switch to '6 STG' for chewy funky phasing.

For infinite rising barber pole phaser, set MODE to BARBER, WAVSHP to RAMP, and set the Depth control to maximum. Change the WAVSHP to SAW to get infinitely falling barber pole phaser. Adjust REGEN to dial in the intensity.

Try slow speed SINE or TRI waveforms on the 8, 12, and 16 stage phasers. For maximum swirl, experiment with the SPREAD param in a stereo setup.

Regen: Adjusts the amount of feedback signal. Adjust high for more extreme phaser sounds.

- IIIIIIIIII

Waveshape: Selects the current LFO (low frequency oscillator) waveform to apply to the phase stages.

- Sine
- Square
- Ramp
- Tri
- Saw

Headroom: Adjusts the amount of distortion within the phaser circuitry. Set to maximum for the cleanest phaser tones, and dial back to add the feel and grit of dirtier phase tones.

- IIIIIIIII

Spread: Determines the offset between the Left and Right channel LFO signals. Listen to the effect it has on the stereo image as you adjust the parameter. Note: Only applies when using the unit in Stereo Configuration.

- Off
- 1/4
- Half
- 3/4
- Full

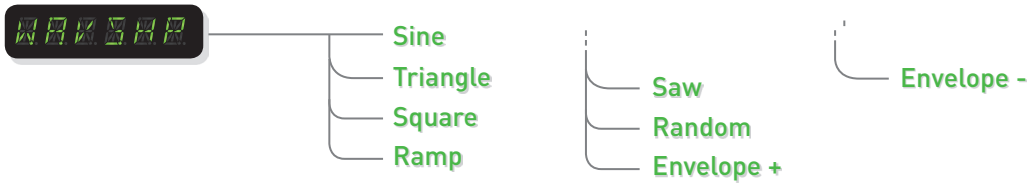
Mod Machines: Filter

An LFO synced filter with three filter types, eight LFO waveshapes and variable resonance. Envelope filtering and traditional Wah effects (with an Expression pedal) are available.

PARAMETERS:

Mode: Selects the current filter type. The low pass filter will cut high frequencies, the high passfilter will cut low frequencies, and wah is a classic wah wah bandpass type filter.

Waveshape: Sets waveform shape that the LFO will utilize. Both + and - envelope modes trigger the filter based on the input level but in opposite directions.



Frequency Mid: Adjusts the frequency midpoint of the filter sweep.

Resonance: Sets the amount of feedback in the filter. High resonance causes ringing at the cutoff frequency and subsequently a boost around the cutoff.

Dry Level: Sets the amount of unfiltered signal at the output.

Spread: Determines the phase offset between the Left and Right LFO signals. Listen to the effect it has on the stereo image as you adjust the parameter. **note:** Only applies when using the unit in a stereo configuration.

TIPS & TRICKS: With the MODE set to WAH and the DEPTH knob at minimum, attach an expression pedal to control the F MID param and you've got a great sounding wah effect with adjustable Q (resonance).

When using the Env+ or Env- waveshapes, adjust the DEPTH knob to set the response of the filter to your playing dynamics. Try higher DEPTH for weaker input signals, or back it off with hotter inputs. The SPEED knob controls how quickly the filter follows the envelope. Set high for funky single line riffs, or lower for smoother response for rhythm work.

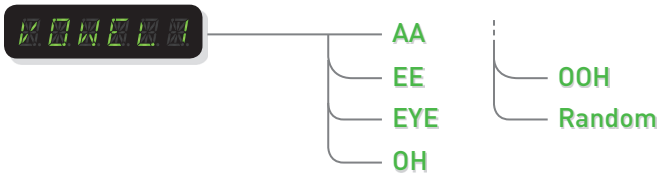
Add some dry signal to make more subtle filtering effects.

Mod Machines: Formant

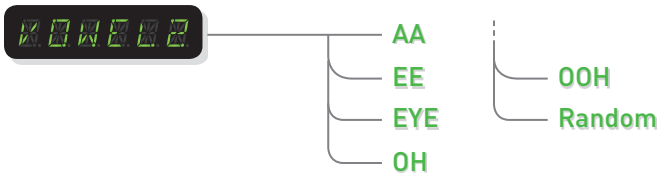
A special filter type that emulates the human vocal tract. The formant machine also features selectable LFO wafeforms.

PARAMETERS:

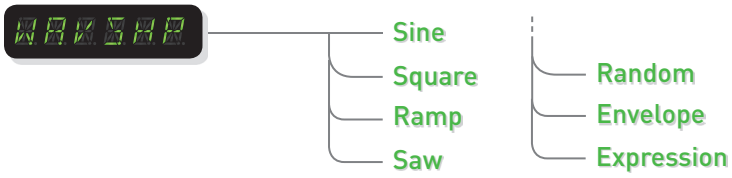
Vowel 1: Sets the first vowel of the formant filter. Setting Vowel 1 to random will choose a new vowel sound every time the LFO triggers the vowel.



Vowel 2: Sets the second vowel of the formant filter. Setting Vowel 2 to random will choose a new vowel sound every time the LFO triggers the vowel.



Waveshape: Selects the current LFO (low frequency oscillator) waveform to apply to the formant filter.



Spread: Determines the phase offset between the Left and Right LFO signals. Listen to the effect it has on the stereo image as you adjust the parameter. **note:** Only applies when using the unit in a stereo configuration.

TIPS & TRICKS: Many cool vocal effects happen in the transition between vowels. With that in mind, experiment with the DEPTH knob to dial in the desired vocal effects.

The DEPTH knob is similarly important when using the ENV WAVSHP, as it sets the dynamic vocal response to your playing. The SPEED knob controls how quickly the formants follow the envelope.

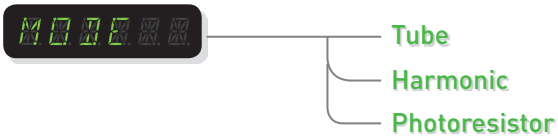
Connect an expression pedal and select EXPR under the WAVSHP param, and Mobius will blend between the two vowels based on the position of the pedal giving you a vocal Wah experience.

Mod Machines: Vintage Trem

The Vinage Trem features three classic tremolo sounds from the ‘60s. The distinctly different tremolo circuits in vintage combo amps of the era resulted in three unique tremolos, each with their own signature sound.

PARAMETERS:

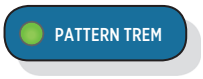
Mode: Selects the current tremolo type. The tube tremolo accomplished its tremolo sound by varying the bias on the output tube circuit. The harmonic trem used band filtering to achieve tremolo with a unique “phasey” sound. The photoresistor tremolo cut the amplifier in and out with a bulb/photoresistor combination for the most choppy and square sounding tremolo of the three.



Pan: Determines the offset between the Left and Right channel LFO signals. Listen to the effect it has on the stereo image as you adjust the parameter. Note: Only applies when using the unit in Stereo Configuration.

TIPS & TRICKS: For thick atmospheric trems, choose the HARM mode at slower speeds. For moody sultry trems, try the TUBE mode. For spy and surf sounds, check out the PHOTO mode at higher speeds.

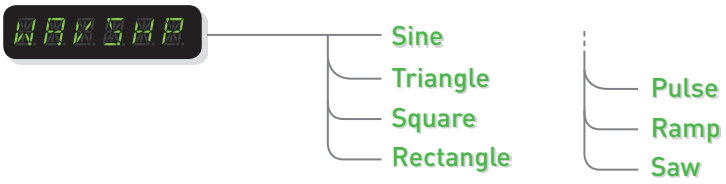
Mod Machines: Pattern Trem



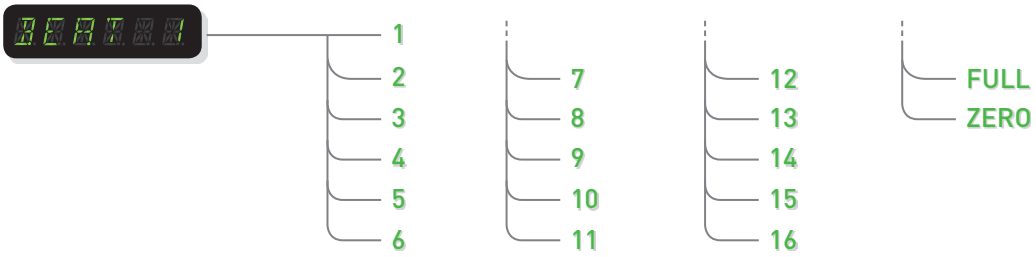
A pattern-sequenced tremolo with user definable patterns. Up to eight beats can be sequenced, with one to sixteen trem cycles per beat. The unique and rhythmic effects can be sync'ed with a single press of the TAP footswitch.

PARAMETERS:

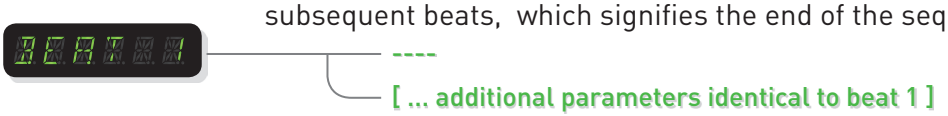
Waveshape: Selects the waveform shape of the tremolo LFO.



Beat 1: Sets the number of subdivisions for each beat. Additionally, when set to full, the signal is present with no tremolo applied during that beat. When set to zero, no signal is present for that beat.



Beat 2-8: Has the same parameters as beat 1 but includes a '----' option to ignore the beat and all subsequent beats, which signifies the end of the sequence.



Pan: Determines the phase offset between the Left and Right LFO signals. Listen to the effect it has on the stereo image as you adjust the parameter. **note:** Only applies when using the unit in a stereo configuration.

TIPS & TRICKS: Tap the TAP footswitch once to start the pattern sequence from the beginning. This is a powerful performance feature to sync the pattern with specific song cues.

Select SINE waveshape and set PAN to ON for a traditional panning effect in a stereo rig. Experiment with different LFO shapes and see how the stereo field is changed. Complex patterns can take on a psychedelic nature when PAN is ON in stereo rigs.

You can create a simple geometric LFO waveform trem by setting BEAT 1 param to '1', and Beat 2 to '---'.

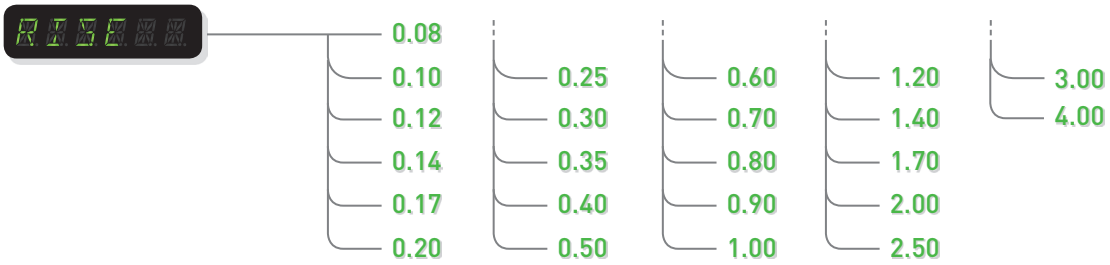
Mod Machines: Autoswell

AUTOSWELL

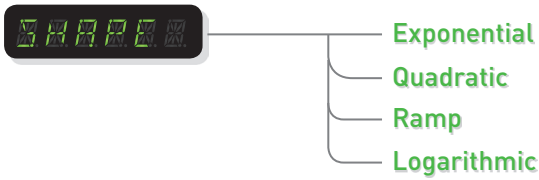
An automatic volume swell effect triggered by the input signal. Various rise times and swell curves are available. A chorus effect can be added to the swelled signal.

PARAMETERS:

Rise Time: Sets the time constant of the swell rise time. The display indicates the ramp time in seconds.



Shape: Sets the shape of the swell.
Exponential – Traditional 'first order' response. It starts to rise quickly, and then slows as it approaches full volume.
Quadratic – A 'second order' swell response. This gives a smoother rise and approach to full volume.
Ramp – A linear ramp that has a constant slope from rise to full volume.
Logarithmic – The opposite of the Exponential response, this choice rises slowly and picks up steam as it approaches full volume.



TIPS & TRICKS: The SPEED and DEPTH knobs control a chorus effect that is added to the swelled signal. With the DEPTH knob at minimum, no chorus effect is added.

Try the LOGARITHMIC shape with fast rise times to allow for more separation between notes when playing single-note phrases.

Try the QUAD Shape with longer rise times to get smooth ambient swells for chordal work.

Mod Machines: Destroyer

An intricate tool to mangle your audio. The speed knob controls rotational speed of the virtual record for the Vinyl effect.

PARAMETERS:

Bit Depth: Reduces the digital bit depth from 32 bits down to 4 bits. Fuzzy crunchy artifacts are introduced as the bit depth is reduced.

- 4 Bit
- 4.5 Bit
- 5 Bit
- 5.5 Bit
- 6 Bit
- 6.5 Bit
- 7 Bit
- 7.5 Bit
- 8 Bit
- 9 Bit
- 10 Bit
- 11 Bit
- 12 Bit
- 13 Bit
- 14 Bit
- 15 Bit
- 16 Bit
- 18 Bit
- 20 Bit
- 24 Bit
- 32 Bit

Sample Rate: Selects the sample rate from 96 KHz to 750Hz. As the sample rate is reduced, aliasing artifacts damage the fidelity of the signal.

- 750Hz
- 1 kHz
- 1.5 kHz
- 2 kHz
- 3 kHz
- 4 kHz
- 5 kHz
- 6 kHz
- 7 kHz
- 8 kHz
- 9 kHz
- 10 kHz
- 11 kHz
- 12 kHz
- 14 kHz
- 16 kHz
- 19 kHz
- 24 kHz
- 32 kHz
- 48 kHz
- 96 kHz

Filter Shape: A collection of filters inspired by telephones, victrolas, am radios, bull horns, and other gadgets. The mixed lofi and full-resolution signal (along with any dVinyl noise) goes through the selected filter.

- OFF
- 1 (Portable Vintage Amp)
- 2 (Victrola Phonograph)
- 3 (70s Clock Radio)
- 4 (Bullhorn Megaphone)
- 5 (Cheerleader's Plastic Megaphone)
- 6 (Antique Telephone Ear Piece)
- 7 (Cell Phone)
- 8 (Apartment Intercom)

Vinyl: Our dVinyl technology introduces random vinyl dust noise and scratches from a 33 1/3 to 78 rpm record. Effect speed determines the rotational speed of the record.

- OFF
- IIIIII

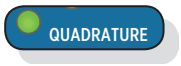
Mix: Mixes the lo-fi (bit and sample-rate dependent) signal with the full resolution signal. Heinously corrupted audio can sit on top of the full resolution signal. Set to full lo-fi mix for just destroyed signal.

D I L

TIPS & TRICKS: Change your sonic landscape and add some instant atmosphere with the FILTER parameter. The FILTER parameter can be a powerful tone-shaping element just used on its own.

The DEPTH knob introduces Vinyl warping that tracks the record speed set by the Speed knob. Add some warping in conjunction with the dVinyl noise for an authentic old-school vinyl experience.

Mod Machines: Quadrature



The Quadrature machine handles another spectrum of signal corruption featuring Quadrature oscillators. Choose from AM (amplitude modulation), FM (frequency modulation), or Frequency Shifting (single side band modulation) to go where few have gone before. This mode is highly flexible with a variety of waveshapes to modulate the modulation.

PARAMETERS:

Mode: Selects the current Quadrature algorithm.
AM – like a tremolo with a crazy-wide speed range. Also commonly referred to as a Ring Modulator.
FM – like a vibrato with a crazy-wide speed range.
Positive Frequency Shifter – Offsets all frequencies by the same amount in the positive direction.
Negative Frequency Shifter – Offsets all frequencies by the same amount in the negative direction.

Shift: Sets the modulating frequency of the selected Mode. Mild effects are achieved at the lowest settings, and more extreme effects come about at higher settings.

Waveshape: Selects the LFO waveshape to modulate the SHIFT param for the selected Mode.

TIPS & TRICKS: The DEPTH knob sets the amount of modulation of the shift frequency. With the DEPTH at minimum, the shift frequency is unaltered and set by the SHIFT param. Turning up the DEPTH will modulate the shift frequency. This is most easily understood when heard with large SHIFT param settings, but will create many interesting sounds with lower shift settings.

When the DEPTH knob is set to maximum, the shift frequency will approach 0 during the LFO cycle. Try using a SQR LFO waveshape with a high SHIFT value and the DEPTH knob at maximum. One half of the square wave will sound like input signal (when the shift frequency is 0) and the other half will sound like the effect at the shift frequency set by the SHIFT param.

Globals Menu

Global parameters affect Mobius regardless of what preset is currently active.

BPM Display: Configures the display to show BPM in **Hz** or **Beats Per Minute.**

- BPM
- Hz

Global Tap: Allows the last tapped tempo to affect all presets regardless of the tempo saved in the preset.

- PRESET - when preset is changed, delay time will change to saved value in preset
- GLOBAL - delay time will remain at the last tapped tempo regardless of current preset

Bypass Set-Up: Changes the bypass mode between **True Bypass** and **Buffered Bypass**. In True Bypass, electromechanical relays are used to bypass Mobius so that no components are touching the input signal. In Buffered Bypass the bypassed signal runs through a high quality analog buffer.

- TRUE BYPASS
- BUFFERED BYPASS

MIDI Channel: Sets the MIDI Channel. Can be set to 1 - 16.

- CH 1 - 16

MIDI Continuous Controllers: Turns MIDI CC messaging (continuous controllers) ON or OFF.

- ON
- OFF

MIDI Patch Change: Turns MIDI patch change messaging ON or OFF.

- ON
- OFF

MIDI Through: When set to ON, MIDI messages that arrive at the input are sent to the output.

- ON
- OFF

Bank Scroll: Sets the maximum bank number to scroll to.

- BNK 1-99

Globals Menu (continued)

EXP input mode: Configures the **EXP** input to use an **Expression Pedal**, an external **TAP** footswitch, or a Strymon **MultiSwitch**.

- PEDAL - for use with Expression Pedal
- TAP - for use with external TAP footswitch, or MultiSwitch for tap and preset select
- BANK - for use with MultiSwitch to select preset banks
- PRESET - for use with MultiSwitch to select presets

Please refer to the MultiSwitch user manual for detailed MultiSwitch setup information: **www.strymon.net/support/multiswitch**

Preset Names: Enables or disables the display of preset names when displaying the current bank. If set to ON or SCROLL, when incrementing through banks with the VALUE ENCODER, the bank number will be displayed with 2 digits followed by the first 3 characters of the preset name.

- OFF - bank numbers are displayed instead of preset names
- ON - the first 6 characters of the preset name are displayed
- SCROLL - the preset name will scroll once completely through its 16 characters then settle on the first 6 characters

MIDI Send State: When a preset is loaded, the MIDI state (CC values) of active preset MIDI parameters are sent to the MIDI output.

- OFF
- ON

MIDI Clock: When set to ON, Mobius will respond to external MIDI clock from the MIDI input.

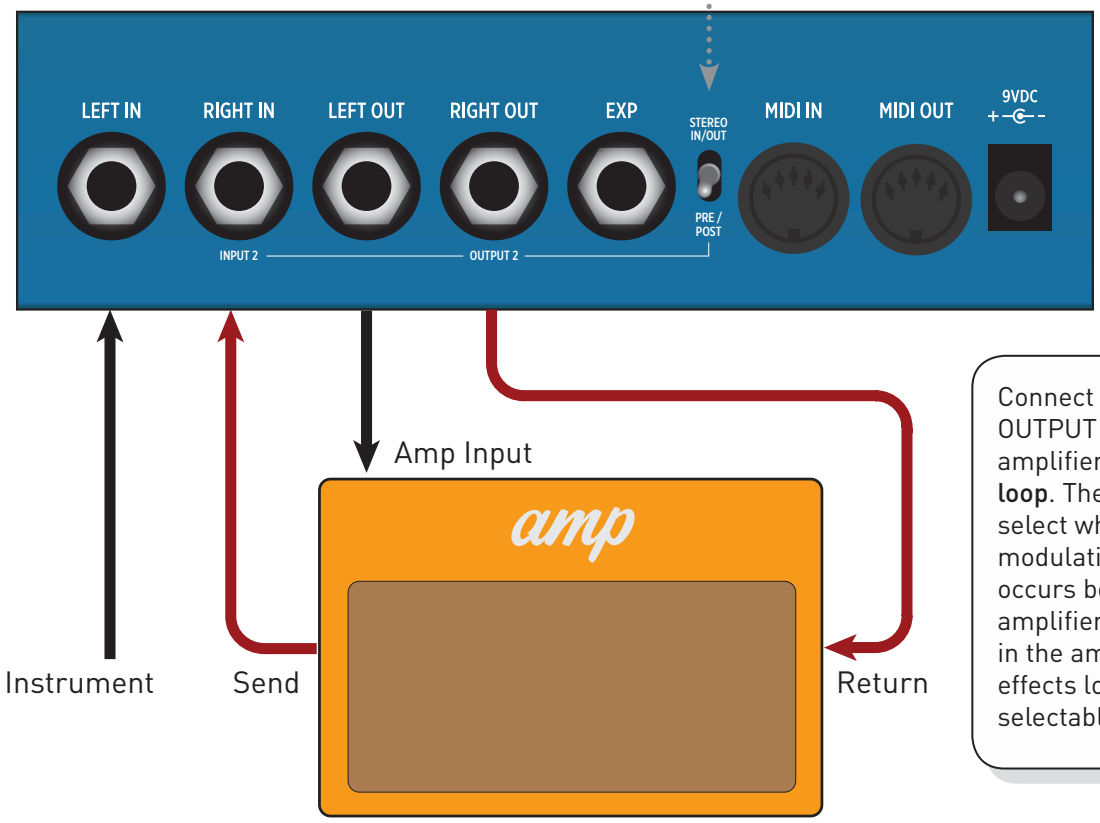
- OFF
- ON

NOTE: If any of the above options do not appear in the GLOBLS menu, you may need to update the firmware to the latest version. Visit the link below for instructions:

www.strymon.net/update

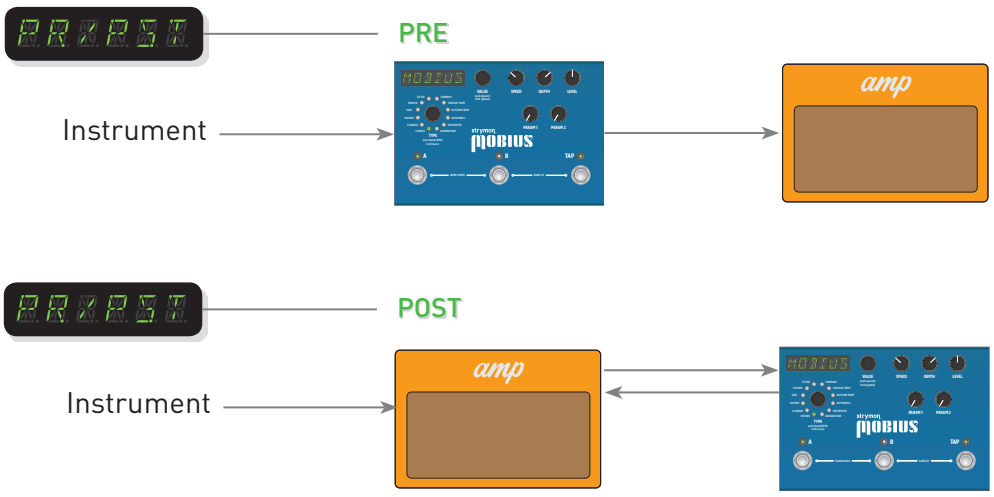
PRE/POST Setup in an Amplifier's Effect Loop

Set the **PRE/POST** switch to the down position to use Mobius in a pre/post type setup.



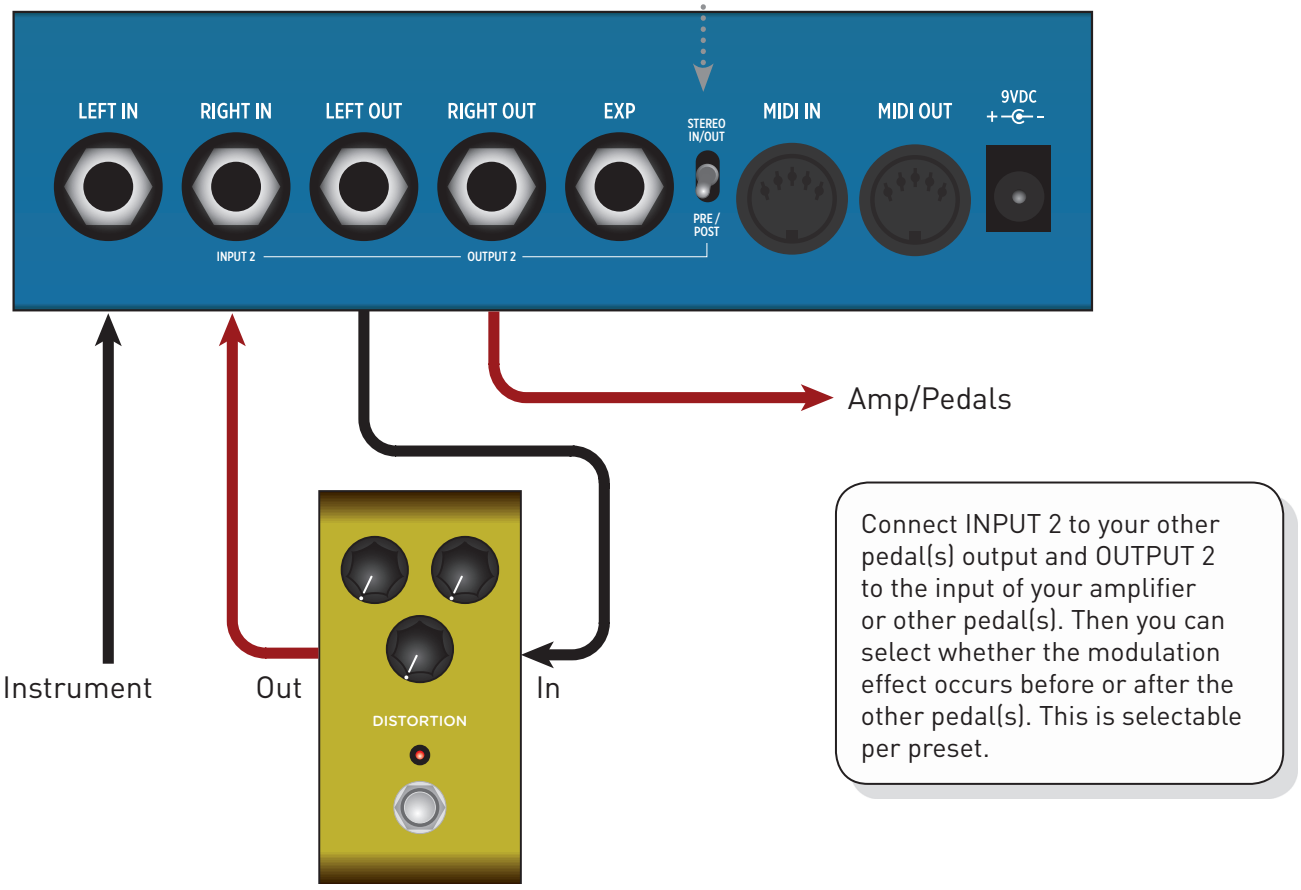
Connect INPUT 2 and OUTPUT 2 to your amplifier's **effects loop**. Then you can select whether the modulation effect occurs before the amplifier input or in the amplifier effects loop. This is selectable per preset.

When connected as above, the PRE/POST setting in the preset menu has the following effect:



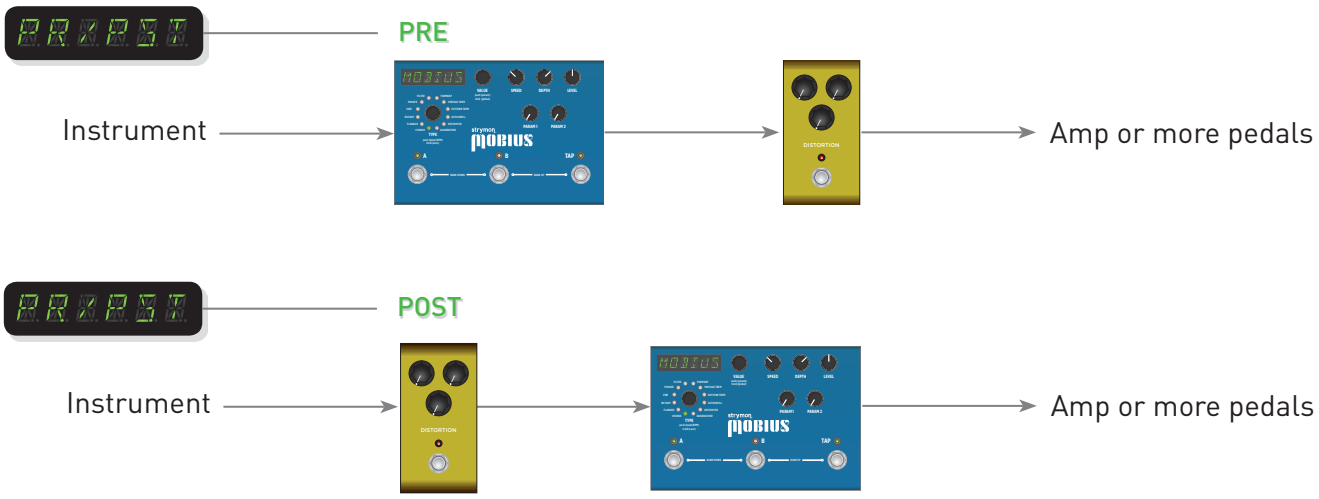
PRE/POST Setup in a Chain of Pedal Effects

Set the **PRE/POST** switch to the down position to use Mobius in a pre/post type setup.



Connect INPUT 2 to your other pedal(s) output and OUTPUT 2 to the input of your amplifier or other pedal(s). Then you can select whether the modulation effect occurs before or after the other pedal(s). This is selectable per preset.

When connected as above, the PRE/POST setting in the preset menu does the following:



MIDI Specification

KNOBS:	CC#	Value Range
Type encoder	19	0-11
Speed	17	0-127
Depth	18	0-127
Level	15	0-127
Param 1	9	0-127
Param 2	16	0-127
PARAMETERS:		
Tap Division	21	0-4
In/Out	22	0-1
Tap Switch	39	0-1
CHORUS - Mode	28	0-4
CHORUS - Mix	29	0-17
CHORUS - Tone	30	0-20
FLANGER - Mode	24	0-5
FLANGER - Regen	25	0-17
FLANGER - Manual	26	0-17
FLANGER - Mix	27	0-20
ROTARY - Mic Distance	33	0-17
ROTARY - Horn Level	34	0-17
ROTARY - Preamp Drive	35	0-17
ROTARY - Slow Rotor Speed	36	0-17
ROTARY - Acceleration	37	0-17
ROTARY - Cab Direction	38	0-1
ROTARY - Tap Select	39	0-1
VIBE - Waveshape	40	0-17
VIBE - Low End	41	0-20
VIBE - Headroom	42	0-17
VIBE - Mode	43	0-1
PHASER - Mode	44	0-6
PHASER - Regen	45	0-17
PHASER - LFO	46	0-3
PHASER - Stereo Spread	47	0-2
PHASER - Headroom	113	0-17
FILTER - Mode	48	0-2
FILTER - Waveshape	49	0-7
FILTER - Resonance	50	0-18
FILTER - Dry Level	51	0-18
FILTER - Frequency Middle	52	0-20
FILTER - Stereo Spread	79	0-4
FORMANT - Vowel 1	65	0-5
FORMANT - Vowel 2	66	0-5
FORMANT - LFO	67	0-6
FORMANT - Stereo Spread	115	0-4
VINTAGE TREM - Mode	31	0-2
VINTAGE TREM - Pan	32	0-1
PATTERN TREM - Waveshape	112	0-6
PATTERN TREM - Beat 1	105	0-17
PATTERN TREM - Beat 2	106	0-18
PATTERN TREM - Beat 3	107	0-18
PATTERN TREM - Beat 4	108	0-18
PATTERN TREM - Beat 5	109	0-18

PARAMETERS:	CC#	Value Range
PATTERN TREM - Beat 6	110	0-18
PATTERN TREM - Beat 7	111	0-18
PATTERN TREM - Beat 8	112	0-18
PATTERN TREM - Pan	32	0-1
AUTOSWELL - Rise Time	57	0-22
AUTOSWELL - Shape	58	0-3
DESTROYER - Bit Depth	59	0-20
DESTROYER - Sample Rate	61	0-20
DESTROYER - Filter	62	0-8
DESTROYER - Vinyl	63	0-18
DESTROYER - Mix	64	0-20
QUADRATURE - Mode	53	0-3
QUADRATURE - Shift 1	54	0-17
QUADRATURE - LFO	56	0-6
QUADRATURE - Mix	55	0-20

MIDI Patch changes:

Mobius presets are arranged in 100 banks of 2 presets each for a total of 200 presets. MIDI access to these presets is available as MIDI program change messages. Via MIDI, the presets are numbered sequentially, for example:

BANK 0A = MIDI program # 0
BANK 0B = MIDI program # 1
BANK 1A = MIDI program # 2
BANK 1B = MIDI program # 3
BANK 2A = MIDI program # 4
etc ...

To access presets 0-127 via MIDI, send regular program change messages. To access presets 128 to 199, first send a MIDI Patch Bank message (CC# 0) with a value of 1, then the program change with a range of 0-72.

Other MIDI CC numbers:	CC#	Value Range
A footswitch	80	down=0 up=127
B footswitch	82	down=0 up=127
TAP footswitch	81	down=0 up=127
Remote TAP	93	any
Expression Pedal	100	0-127
Bypass	102	byp=0 eng=127
Phase Reset	125	any
MIDI Patch Bank	0	0-1

(value = 0 or 1, send a 0 to access presets 0 to 127 send a 1 to access presets 128 to 199)

MIDI Time Clock:

Mobius will accept MIDI clock at the MIDI input and sync modulation speed. A MIDI start clock message resets the modulation phase.

Features

- 12 hand crafted modulation machines
- Modulation machine subtypes for 33 total discrete algorithms
- Ultra Low Noise, high performance A/D and D/A Converters
- Premium analog front end and output section
- High Performance DSP
- 200 presets, selectable via encoder or on the fly via footswitch
- Numerous deep edit parameters on all mod machines
- Stereo Input & Output
- Pre-post mode for flexible routing, allowing you to place Mobius in two different places in your mono signal chain.
- Expression pedal input with selectable simultaneous control over multiple knob parameters
- Pre/Post configuration available via rear panel toggle switch
- Full time Tap Tempo footswitch and external Tap footswitch available via EXP input
- Rugged & Lightweight Anodized Aluminum Chassis
- Intuitive, performance friendly User Interface
- Global bypass selectable between True Bypass or Analog Buffered Bypass

Specifications

Input Impedance	1Meg Ohm
Output Impedance	100 Ohm
Signal to Noise	115 dB typical
A/D & D/A	24-bit 96kHz
Frequency Response	20Hz to 20kHz
Max Input Level	+8dBu
Bypass Switching	True Bypass (electromechanical relay switching) or Analog Buffered Bypass
Dimensions	5” deep x 6.75” wide x 1.87” tall

Power Supply

Input Voltage	9VDC Center Negative
Required Current	300mA

Strymon Non-Transferrable Limited Warranty

Warranty
Strymon warrants the product to be free from defects in material and workmanship for a period of one (1) year from the original date of purchase. If the product fails within the warranty period, Strymon will repair or, at our discretion, replace the product at no cost to the original purchaser.

Exclusions
This warranty covers defects in manufacturing discovered while using this product as recommended by Strymon. This warranty does not cover loss or theft, nor does the coverage extend to damage caused by misuse, abuse, unauthorized modification, improper storage, lightning, or natural disasters.

Limits of Liability
In the case of malfunction, the purchaser's sole recourse shall be repair or replacement, as described in the preceding paragraphs. Strymon will not be held liable to any party for damages that result from the failure of this product. Damages excluded include, but are not limited to, the following: lost profits, lost savings, damage to other equipment, and incidental or consequential damages arising from the use, or inability to use this product. In no event will Strymon be liable for more than the amount of the purchase price, not to exceed the current retail price of the product. Strymon disclaims any other warranties, express or implied. By using the product, the user accepts all terms herein.

How to Obtain Service Under this Warranty
For North American customers: Contact Strymon through our website at http://www.strymon.net/support for Return Authorization and information. Proof of original ownership may be required in the form of a purchase receipt.

For International Customers: Contact the Strymon dealer from which the product was purchased from in order to arrange warranty repair service.

Strymon® is a division of Damage Control®, LLC.